

**THAT WHICH IS CLAIMED IS:**

1. A fluid materials transfer system useful for transferring hazardous fluids from a source to a target while maintaining the fluid materials within a closed environment in order to provide the maximum personal protection to the user during a transfer operation, the system comprising:

    fluid storage means for storing a fluid within a closed environment;

    first flow control means operable with the fluid storage means for delivering a fluid from a source location thereto while maintaining the fluid within the closed environment;

    sensing means for sensing an amount of fluid carried by the storage means;

    second flow control means operable with the storage means for delivering the fluid therein to a target location while maintaining the fluid within the closed environment; and

    processing means operable with the first and second flow control means for controlling flows therewith in response to an amount of fluid sensed by the sensing means.